

AMENDMENTS TO THE SPECIFICATION

Please amend the specification by inserting as the first paragraph of the specification:

This application claims the benefit of prior filed co-pending Great Britain application Serial No. 0224352.5 filed on October 19, 2002.

Please replace the paragraph beginning at page 13, line 24 with the following rewritten paragraph:

The RF MODEM 404 outputs a synthesized GMSK signal to a dual-port loop filter 406. This filter is used for both a direct-port and a dual-port of the VCO design of the present invention, i.e. the direct port uses an 'up' (high-frequency response) pin, and the dual-port uses a 'down' (low-frequency response) pin. The dual-port loop filter 406 outputs a filtered signal to a TX VCO circuit ~~402~~ 408. The TX VCO circuit ~~402~~ 408 is modulated to the desired RF frequency, using the direct and dual port directly. The TX VCO circuit ~~402~~ 408 is fed to a driver function 410, which is a first stage amplifier and buffer used for TX VCO isolation. The driver function 410 outputs a signal to a filter 412 that filters harmonics, and thereafter to the RF power amplifier (PA) 414. The RF PA is the main RF power amplifier used to achieve the desired output signal power. The high-power RF signal is fed to a coupler 464 that couples the RF signal to the power amplifier control (PAC) 462 for control analysis. The PAC 462 controls the power level and the time ramp-up and ramp-down of the transmitted signal. The high-power RF signal is input to an antenna switch 416, which performs the RF switching between TX and RX modes of operation for time division multiplexing.

Please replace the paragraph beginning at page 15, line 20 with the following rewritten paragraph:

A phase detector 440 in the RF MODEM 404 detects the phase difference between the divided TX VCO ~~402~~ 408 and the TCXO 428 reference signal. A charge pump 442 introduces current into, or out of, the loop filter 406, in proportion to the detected phase difference. A loop divider 444 divides the frequency from the TX VCO ~~402~~ 408 to match the reference signal frequency.

Please replace the paragraph beginning at page 18, line 15 with the following rewritten paragraph:

~~It is envisaged that the~~ The filtered signal ~~may also be~~ is routed to an analogue to digital converter (A/D). The A/D output is attenuated and passed to the voltage controlled oscillator (VCO) steering line. A high-pass filter filters the signal from the dual-port. Combining both signals ~~from~~ from the dual-port and the direct port yields the desired GMSK signal. An analogue to digital converter (A/D) 430 is used to sample the voltage at the VCO steering line, while changing the transmitted channel. The A/D 430 is operably coupled to a host microprocessor, for example DSP 402 of FIG. 4, so that the sampled values can be processed and attenuator values stored in memory. As the transmit channel of the wireless communication unit is known at any point in time, the VCO sensitivity for that channel can be estimated. During factory set-up of the wireless communication unit, the desired attenuation for each of the transmit channels is calculated. This information is preferably stored in a memory element operably coupled to DSP 402 as an array indicating variable attenuator values. A preferred list of suitable attenuator values is illustrated in Table 3.